Remarks

The Applicants acknowledge the rejection of Claims 1 – 8 under 35 U.S.C. §112.

The Applicants have amended Claims 1 and 2 in accordance with the Examiner's helpful suggestions to clarify "20 - 50°C" and "adhesive strength." Claims 2 – 6 and 8 have additionally been amended as to form.

Claim 7 has been cancelled, thereby rendering the Examiner's helpful comments as being moot. Claim 8 has been amended to depend from new Claim 9, described below.

New Claim 9 recites a dicing method comprising attaching circuit-formed silicon wafer to dicing tape comprising a tackifiable adhesive layer composed of a soluble polyimide and an epoxy-modified polysiloxane at 1 – 100 parts by weight with respect to 100 parts by weight of the soluble polyimide formed on a release film, and dicing to form separate individual IC chips. Entry into the Official File and examination on the merits is respectfully requested.

Separately, Claim 1 has additionally been amended to recite that the tackifiable adhesive layer is composed mainly of a soluble polyimide and an epoxy-modified polysiloxane at 1 – 100 parts by weight with respect to 100 parts by weight of the soluble polyimide. That tackifiable adhesive layer is formed on a release film. Support for those amendments may be found as follows: The soluble polyimide may be found on page 3, lines 25 – 27, of the Applicants' Specification. The epoxy-modified polysiloxane may be found at page 8, lines 29 – 34; page 13, line 36 through page 14, line 1; and page 14, line 23. The amount of the epoxy-modified siloxane may be found on page 8, line 36 through page 9, line 1. Finally, the tackifiable adhesive layer on a release film may be found on page 12, lines 9 – 13.

The Applicants acknowledge the rejection of Claims 1 – 8 under 35 U.S.C. §102 as being anticipated by Capote. The Applicants respectfully submit that all of the solicited claims are

patentable over Capote for the reasons set forth below.

Capote is directed to a semiconductor flip chip. The chip includes a substrate, an integrated circuit chip and an encapsulant positioned between the substrate and the integrated circuit chip. The encapsulant includes a first layer of a polymer or polymer composite and a second layer of a polymer flux. The encapsulant can be a thin film of polyimide coated with a thin film of polyimide siloxane thermoplastic adhesive as helpfully noted by the Examiner.

However, Capote fails to disclose, teach or suggest a tackifiable adhesive layer composed of a polyimide siloxane and an epoxy-modified siloxane that has an adhesive force after curing as well as a tacking force before curing. Careful scrutiny of the entire Capote disclosure reveals that there is utterly no disclosure concerning the polyimide siloxane and epoxy-modified polysiloxane. The Applicants accordingly respectfully submit that this difference removes the rejection under §102.

To further reinforce the point that Capote fails to disclose, teach or suggest an adhesive force after curing as well as a tacking force before curing, one of the Applicants herein, Mr. Hayashi, conducted a comparative experiment wherein he took Example 1 from the Applicants' Specification and repeated it, except that the epoxy-modified siloxane was omitted. In that regard, we invite the Examiner's attention to the enclosed Declaration of Mr. Hayashi. We further invite the Examiner's attention to the Applicants' Specification at page 14, at lines 16 and 17. Both that disclosure and the Declaration should be taken together.

The Applicants' Specification reveals that Example 1 produced an adhesive force prior to curing of the 140 gf/cm and the adhesive force after curing was 1520 gf/cm. In sharp contrast, the adhesive force or tacking force, was 10 gf/cm in the Comparative Example. This demonstrates a sharp difference in tacking force between the invention as recited in the solicited claims and, for

example, Capote. The presence of the epoxy-modified polysiloxane in combination with the polyimide siloxane results in the invention having a tacking force prior to curing whereas the absence of the epoxy-modified polysiloxane results in a product not having a tacking force prior to curing. This is further evidence of the patentability of the solicited claims over the prior art. Withdrawal of the 35 U.S.C. §102 rejection of the claims is respectfully requested.

In light of the foregoing, the Applicants respectfully submit that the entire Application is now in condition for allowance, which is respectfully requested.

Respectfully submitted,

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